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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,120	03/26/2004	David W. Nicholas	45038-296550	9199

23370 7590 02/16/2006

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EXAMINER

PHAM, MINH CHAU THI

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/811,120

Applicant(s)

NICHOLAS ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/4/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Specification

The abstract of the disclosure is again objected to because legal phraseology "comprises" is used in the abstract. Correction is required. See MPEP § 608.01(b).

The use of the trademark PURAFIL®, PK-12, PK-18 and MEDIAPAK® (page 1, lines 24-25, TEFLON® (page 11, line 21 and page 13, line 3) have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 7-15, 17-22 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry, Jr. et al (6,168,647 B1), in view of Hammes (6,001,145).

Perry, Jr. et al disclose an apparatus for mounting to an air circulation system comprising a housing (11) with a filter element (18) located inside the housing (11) with an inlet (12a) and an outlet (33) and the filter element (18) being sealed in the housing (11) (see Fig. 1). Perry, Jr. et al further disclose a guide (see 113 in Fig. 4) associated with the filter (18) having a contact angle that is substantially coplanar with a center of gravity of the air filter (18) (see 85 in Figs. 2 & 4, col. 6, lines 17-20, lines 29-42, col. 7,

lines 31-43 and line 61 through col. 8, line 5). Claims 1-4, 7-15, 17-22 and 24-27 differ from the disclosure of Perry, Jr. et al in that the apparatus having a notch associated with the housing. Hammes discloses an apparatus for mounting to an air circulation system having a notch (40) associated with the housing (33) wherein the notch (40) comprises a contact surface for mounting (see 36 in Figs. 4 & 5, col. 6, line 60 through col. 7, line 65). Hammes further discloses a groove or notch (49) in cooperation with the level arms (35, 26) at a parallel upward angle when the filter module is engaged with the frame (see details of Fig. 11, col. 8, line 55 –68). Hammes also discloses a gripping device associated with the apparatus (see unlabeled part on top of item 13 in Fig. 7). Hammes also discloses a method of mounting an air circulation component (6) to an air circulation system (1) comprising the steps of providing a notch (49 in Fig. 11) associated with an air circulation component wherein the notch comprises a contact surface (46), providing a guide (50) associated with the air circulation system, positioning the air circulation component such that a portion of the contact surface is adjacent the load surface with a contact angle (see details of Fig. 11) and a sealing pressure against a portion of the air circulation system (30 in Fig. 4). It is inherently understood that by receiving a guide (113) of the filter (18) in the notch (40) as taught by Hammes the filter (18) causes a sealing pressure adjacent to a trailing portion of the air circulation component against a portion of the air circulation system. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a notch as taught by Hammes to receive the guide of in the filtering apparatus of Perry, Jr. et al so that the air circulation component can be snugly fit into

the air circulation system to promote high filtration efficiency and to prevent air bypassing.

Claims 5, 6, 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perry, Jr. et al (6,168,647 B1), in view of Hammes (6,001,145), as applied supra, and further in view of Marchart et al (6,881,238 B2).

Claims 5, 6, 16 and 23 call for microbumps adapted to be in contact with a portion of the contact surface. Marchart et al disclose microbump (10 in Figs. 1-3) wherein the microbump (10) is in contact with a portion of the contact surface (11, 14). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide microbumps as taught by Marchart et al in the apparatus of Perry, Jr. et al and Hammes to facilitate efficient sealing of the raw air space relative to the clean air space of the apparatus.

Response to Amendment

Applicant's arguments filed on December 9, 2006 have been fully considered but they are not persuasive.

Applicant argues that the primary reference Shindo et al does not disclose or suggest use of a filter with a notch or any other contact surface for mounting adjacent to the load bearing surface wherein the adjacent surfaces include a contact angle that is substantially coplanar with a center of gravity of the housing. The Examiner now drops Shindo et al reference and newly introduces Perry, Jr. et al to show an apparatus for mounting to an air circulation system comprising a housing (11) with a filter element (18) located inside the housing (11) with an inlet (12a) and an outlet (33) and the filter

element (18) being sealed in the housing (11) (see Fig. 1). Perry, Jr. et al further disclose a guide (see 113 in Fig. 4) associated with the filter (18) having a contact angle that is substantially coplanar with a center of gravity of the air filter (18) (see 85 in Figs. 2 & 4, col. 6, lines 17-20, lines 29-42, col. 7, lines 31-43 and line 61 through col. 8, line 5). It is inherently understood that by receiving a guide (113) of the filter (18) in the notch (40) as taught by Hammes the filter (18) causes a sealing pressure adjacent to a trailing portion of the air circulation component against a portion of the air circulation system.). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a notch as taught by Hammes to receive the guide of in the filtering apparatus of Perry, Jr. et al so that the air circulation component can be snugly fit into the air circulation system to promote high filtration efficiency and to prevent air bypassing.

Applicant's arguments with respect to claims 1-27 have been thoroughly considered but are moot in view of the new ground(s) of rejection, as discussed above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Minh-Chau Pham
Patent Examiner
Art Unit : 1724
February 14, 2006